

CORRECTION

To: Commissioner of the Patent Office

Identification of the International Application PCT/JP99/06602

Applicant

Name: TAKADA Kanji

Address: 618-2, Gokoumachidori Gojoagaru Azuchi-cho, Shimogyo-ku,

Kyoto-shi, Kyoto 600-8040 JAPAN

Country of nationality: JAPAN

Country of residence : JAPAN

Agent

Name: IMAMURA Masazumi

Signature //

Address: 5th Floor, KRF Bldg., 5-5, Kyobashi 1-chome, Chuo-ku,

Tokyo 104-0031 JAPAN

Date of Invitation

07. 12. 99

Item to be Corrected

Box No.IX SIGNATURE OF APPLICANT OR AGENT of the Request

Subject Matter of Correction

As per the attached sheets

7 List of Attached Documents

Request page no.3

One copy



Original (for SUBMISSION) - printed on 26.11.1999 11:08:26 AM

VI-3	Priority document request		
	The receiving Office is requested to prepare and transmit to the International	VI-1, VI-2	,
	Bureau a certified copy of the earlier	'.]	•
	application(s) identified above as item(s)		1
VII-1	International Searching Authority Chosen	European Patent Off:	ice (EPO) (ISA/EP)
VIII	Check list	number of sheets	electronic file(s) attached
VIII-1	Request	4	 -
VIII-2	Description	39	-
VIII-3	Claims	3	-
VIII-4	Abstract	1	99355m.txt
VIII-5	Drawings	5	T-
VIII-7	TOTAL	52	
	Accompanying items	paper·document(s) attached	electronic file(s) attached
VIII-8	Fee calculation sheet	\	_
VIII-9	Separate signed power of attorney	✓ .	-
VIII-16	PCT-EASY diskette	-	diskette
VIII-17	Other (specified):	patent revenue	-
		stamps	
VIII-17	Other (specified):	certificate of	
	1	payment of fee	
VIII-18	Figure of the drawings which should		
VIII-19	accompany the abstract Language of filing of the international		
VIII-13	application	English	
IX-1	Signature of applicant or agent		
		M. Imamu	na
IX-1-1	Name (LAST, First)	IMAMURA, Masazumi	
X-2	Signature of applicant or agent	19. Shi ozaw	<u> </u>
X-2-1	Name (LAST, First)	SHIOZAWA, Hisao	
Х-3	Signature of applicant or agent		, ,
Į.		Marie in the second	
[

FOR RECEIVING OFFICE USE ONLY

10-1	Date of actual receipt of the purported international application	·		
10-2	Drawings:		,	
10-2-1	Received	İ		•
10-2-2	Not received .			
10-3	Corrected date of actual receipt due to later but timely received papers or drawings completing the purported international application			-



Original (for SUBMISSION) - printed on 26.11.1999 11:08:26 AM

99355M

	T	
0 0-1	For receiving Office use only International Application No.	OCT -
0-2	International Filing Date	26.11.99
0-3	Name of receiving Office and "PCT International Application"	
0-4	Form DOT/DOMON DOT Downson	
0-4-1	Form - PCT/RO/101 PCT Request Prepared using	PCT-EASY Version 2.90
		(updated 15.10.1999)
0-5	Petition	(upuaceu 13.10.1999)
	The undersigned requests that the	
	present international application be	
	processed according to the Patent Cooperation Treaty	•
0-6	Receiving Office (specified by the applicant)	Japanese Patent Office (RO/JP)
0-7	Applicant's or agent's file reference	99355M
ı	Title of invention	An Oral Formulation for Gastrointestinal
_ :		Drug Delivery
II	Applicant	
II-1	This person is:	applicant and inventor
11-2	Applicant for	all designated States
11-4	Name (LAST, First)	TAKADA, Kanji
11-5	Address:	618-2, Gokoumachidori Gojoagaru
		Azuchi-cho, Shimogyo-ku
		Kyoto-shi, Kyoto 600-8040
	0.0	Japan
II-6	State of nationality	JP
11-7	State of residence	JP
IV-1	Agent or common representative; or address for correspondence	
	The person identified below is hereby/has	agent
	been appointed to act on behalf of the	
	applicant(s) before the competent International Authorities as:	
IV-1-1	Name (LAST, First)	IMAMURA, Masazumi
IV-1-2	Address:	5th Floor, KRF Bldg., 5-5, Kyobashi
		1-chome
	·	Chuo-ku, Tokyo 104-0031
		Japan
IV-1-3	Telephone No.	03-3271-1331
IV-1-4	Facsimile No.	03-3271-1410
IV-2	Additional agent(s)	additional agent(s) with same address as
		first named agent
IV-2-1	Name(s)	SHIOZAWA, Hisao; KAMATA, Junji
	<u> </u>	



VI-2-3

Country

Original (for SUBMISSION) - printed on 26.11.1999 11:08:26 AM

Designation of States V-1 Regional Patent AP: GH GM KE LS MW SD SL SZ TZ UG ZW and (other kinds of protection or treatment, if any other State which is a Contracting any, are specified between parentheses after the designation(s) concerned) State of the Harare Protocol and of the PCT EA: AM AZ BY KG KZ MD RU TJ TM and any other State which is a Contracting State of the Eurasian Patent Convention and of the PCT EP: AT BE CH&LI CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE and any other State which is a Contracting State of the European Patent Convention and of the OA: BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG and any other State which is a member State of OAPI and à Contracting State of the PCT V-2 National Patent AE AL AM AT AU AZ BA BB BG BR BY CA (other kinds of protection or treatment, if CH&LI CN CR CU CZ DE DK DM EE ES FI any, are specified between parentheses GD GE GH GM HR HU ID after the designation(s) concerned) ILΙN IS JP KE KG KR KZ LC LK LR LS LT LU LV MA MD MG MK NO NZ PL PT RO RU SD SE SG SI TM TR TT TZ UA UG US UZ SK SL ZA ZW V-5 Precautionary Designation Statement In addition to the designations made unde items V-1, V-2 and V-3, the applicant also makes under Rule 4.9(b) all designations which would be permitted under the PCT except any designation(s) of the State(s) indicated under item V-6 below. The applicant declares that those additional designations are subject to confirmation and that any designation which is not confirmed before the expiration of 15 months from the priority date is to be regarded as withdrawn by the applicant at the expiration of that time limit. V-6 Exclusion(s) from precautionary NONE designations VI-1 Priority claim of earlier national application VI-1-1 Filing date 27 November 1998 (27.11.1998) VI-1-2 Number Patent Application 10-353966 VI-1-3 Country JP VI-2 Priority claim of earlier national application VI-2-1 Filing date 21 September 1999 (21.09.1999) VI-2-2 Number Patent Application 11-266433

99355M



Original (for SUBMISSION) - printed on 26.11.1999 11:08:26 AM

99355M

VI-3	Priority document request		
	The receiving Office is requested to	VI-1, VI-2	
	prepare and transmit to the International	·	
	Bureau a certified copy of the earlier	·	
101	application(s) identified above as item(s)		
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VIII	Check list	number of sheets	electronic file(s) attached
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VIII-4	Abstract	1	99355m.txt
VIII-5	Drawings	5	-
VIII-7	TOTAL	52	
	Accompanying items	paper·document(s) attached	electronic file(s) attached
VIII-8	Fee calculation sheet	✓	_
VIII-9	Separate signed power of attorney	√	
VIII-16	PCT-EASY diskette	-	diskette
VIII-17	Other (specified):	patent revenue	_
		stamps	
VIII-17	Other (specified):	certificate of	-
		payment of fee	
VIII-18	Figure of the drawings which should accompany the abstract		
VIII-19	Language of filing of the international	English	· · · · · · · · · · · · · · · · · · ·
	application		<u> </u>
X-1	Signature of applicant or agent	.•	
X-1-1	Name (LAST, First)	IMAMURA, Masazumi	•
X-2	Signature of applicant or agent		
X-2-1	Name (LAST, First)	SHIOZAWA, Hisao	
Х-3	Signature of applicant or agent	·	
	_		
(-3-1	Name (LAST, First)	KAMATA, Junji	
` - '	, tame (2 to 1, 1 ii 3)	VWHYA' ANTII	

FOR RECEIVING OFFICE USE ONLY

10-1	Date of actual receipt of the purported international application		·		
10-2	Drawings:				
10-2-1	Received				
10-2-2	Not received .				
10-3	Corrected date of actual receipt due to later but timely received papers or drawings completing the purported international application				





Original (for SUBMISSION) - printed on 26.11.1999 11:08:26 AM

99355M

10-4	Date of timely receipt of the required corrections under PCT Article 11(2)		./
10-5	International Searching Authority	ISA/EP	
10-6	Transmittal of search copy delayed		

FOR INTERNATIONAL BUREAU USE ONLY

11-1	Date of receipt of the record copy by		- **	
	the International Bureau		 •	



PCT (ANNEX - FEE CALCULATION SHEET)

Original (for SUBMISSION) - printed on 26.11.1999 11:08:26 AM

(This sheet is not part of and does not count as a sheet of the international application)

0	For topolising Office was only	1	
0-1	For receiving Office use only International Application No.		
0-1	international Application No.		
0-2	Date stamp of the receiving Office	<u> </u>	<u>·</u>
0-4	Form - PCT/RO/101 (Annex) PCT Fee Calculation Sheet		•
0-4-1	Prepared using	PCT-EASY Vers	ion 2 00:
	. ·	(updated 15.1	
0-9	Applicant's or agent's file reference	99355M	
2	Applicant	TAKADA, Kanji	•
12	Calculation of prescribed fees	fee amount/multiplier	total amounts (JPY)
12-1	Transmittal fee		18,000
12-2	Search fee	□	120,000
12-3	International fee	<u> </u>	120,000
•	Basic fee	•	
	(first 30 sheets) b1	54,800	
12-4	Remaining sheets	22	1
12-5	Additional amount (X)	1,300	
12-6	Total additional amount b2	<u> </u>	
12-7	b1 + b2 = B		
12-8	Designation fees		
	Number of designations contained in international application	82	
12-9	Number of designation fees payable (maximum 10)	10	
12-10	Amount of designation fee (X)	12,600	
12-11	Total designation fees D	126,000	
12-12	PCT-EASY fee reduction R	-16,900	
12-13	Total International fee (B+D-R)	⇒ ,	192,500
12-14	Fee for priority document		
	Number of priority documents requested	2	
12-15		1,500	
12-16	Total priority document fee P	⇒	3,000
12-17	TOTAL FEES PAYABLE (T+S+I+P)	⇔	333,500
12-19	Mode of payment	Transmittal fe	ee: revenue stamps
		Search fee: re	
			fee: bank draft
	·		ment fee: revenue stamps
	<u> </u>	ELTOTICA GOGG	ment ree: revenue stamps

VALIDATION LOG AND REMARKS

13-1-1	Applicant remarks Names	9621	PATENT ATTORNEY	IMAMURA Masazumi
13-1-2	Applicant remarks Names	9263	PATENT ATTORNEY	SHIOZAWA Hisao



PCT (ANNEX - FEE CALCULATION SHEET) Original (for SUBMISSION) - printed on 26.11.1999 11:08:26 AM

99355M

13-1-3	Applicant remarks Names	9584 PATENT ATTORNEY KAMATA Junji
13-2-1	Validation messages Request	Green? The title of the invention should preferably be entered in capital letters. Please verify.
13-2-2	Validation messages States	Green? More designations could be made. Please verify.
13-2-3	Validation messages Names	Green? Applicant 1.: Telephone No. missing
		Green? Applicant 1.:Facsimile No. missing
13-2-6	Validation messages Contents	Green? Figure of the drawings which should accompany the abstract not specified. Please verify.
13-2-9	Validation messages Annotate	Yellow! All indications that can be made on the Request form are specifically provided for by the software. Please confirm validity of additional indication.
13-2-10	Validation messages For receiving Office/International Bureau use only	Green? Verify electronic data for consistency against printed form.

PATENT COOPERATION TREATY

From the

INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To:

IMAMURA, Masazumi 5th Floor, KRF Bldg., 5-5, Kyobashi 1-chome Chuo-ku, Tokyo 104-0031 JAPON



PCT

NOTIFICATION OF TRANSMITTAL OF THE INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Rule 71.1)

Date of mailing (day/month/year)

23.01.2001

Applicant's or agent's file reference 99355M

Priority date (day/month/year)

IMPORTANT NOTIFICATION

International application No. PCT/JP99/06602

International filing date (day/month/year) 26/11/1999

27/11/1998

Applicant

TAKADA Kanji et al.

- 1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
- 2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
- 3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.

4. REMINDER

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

Name and mailing address of the IPEA/

Authorized officer

Baillou, V

European Patent Office D-80298 Munich

Tel. +49 89 2399 - 0 Tx: 523656 epmu d

Fax: +49 89 2399 - 4465

Tel.+49 89 2399-8236



(PCT Article 36 and Rule 70)

Applicant's or ag	ent's file reference	T	See Notifi	cation of Transmittal of International
99355M		FOR FURTHER ACT		y Examination Report (Form PCT/IPEA/416)
International app	lication No.	International filing date (day	/month/year)	Priority date (day/month/year)
PCT/JP99/06	602	26/11/1999		27/11/1998
International Pat A61K9/20	ent Classification (IPC) or na	tional classification and IPC		
Applicant				
TAKADA Kan	iji et al.			
and is tran	smitted to the applicant a	ccording to Article 36.		ernational Preliminary Examining Authority
2. This REPO	OH I consists of a total of	5 sheets, including this co	ver sneet.	·
been a	amended and are the bas		eets containing re	on, claims and/or drawings which have ectifications made before this Authority ne PCT).
These ann	exes consist of a total of	sheets.		
	Basis of the report Priority Non-establishment of or Lack of unity of inventio Reasoned statement un citations and explanatio Certain documents cite Certain defects in the in-	n der Article 35(2) with rega ns suporting such stateme d	rd to novelty, invent	and industrial applicability entive step or industrial applicability;
Date of submission	on of the demand	Da	te of completion of	this report
07/02/2000		23	.01.2001	<u> </u>
Name and mailing address of the international preliminary examining authority: European Patent Office			thorized officer	Sept ASSOCIA MICHAEL SEPTIMENTAL SEPTIMENT

Hedegaard, A

Telephone No. +49 89 2399 8644

Fax: +49 89 2399 - 4465

Tel. +49 89 2399 - 0 Tx: 523656 epmu d

D-80298 Munich

International application No. PCT/JP99/06602

I. Basis of the report

	the		on under Article 14 are referred to in this report as "originally filed" and are not annexed to lo not contain amendments (Rules 70.16 and 70.17).):					
	1-3	39	as originally filed					
	Cla	aims, No.:						
	1-1	3	as originally filed					
	Dra	awings, sheets:						
	1/5	-5/5	as originally filed					
2.		With regard to the language , all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.						
	These elements were available or furnished to this Authority in the following language: , which is:							
	☐ the language of a translation furnished for the purposes of the international search (under Rule 2							
	\square the language of publication of the international application (under Rule 48.3(b)).							
		the language of a 55.2 and/or 55.3).	translation furnished for the purposes of international preliminary examination (under Rule					
3.		With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the nternational preliminary examination was carried out on the basis of the sequence listing:						
		contained in the in	ternational application in written form.					
		filed together with	the international application in computer readable form.					
		furnished subsequ	ently to this Authority in written form.					
		furnished subsequ	ently to this Authority in computer readable form.					
		The statement that the subsequently furnished written sequence listing does not go beyond the disclosure the international application as filed has been furnished.						
		The statement that listing has been ful	the information recorded in computer readable form is identical to the written sequence raished.					
4.	The	amendments have	resulted in the cancellation of:					
		the description,	pages:					
		the claims,	Nos.:					

1. This report has been drawn on the basis of (substitute sheets which have been furnished to the receiving Office in

International application No. PCT/JP99/06602

		the drawings,	sheets:		
5.		•		•	some of) the amendments had not been made, since they have been as filed (Rule 70.2(c)):
		(Any replacement she report.)	eet contai	ning such	n amendments must be referred to under item 1 and annexed to this
6.	Add	itional observations, if	necessar	y:	·
٧.		soned statement und tions and explanation			rith regard to novelty, inventive step or industrial applicability;
1.	Stat	ement			
	Nov	elty (N)	Yes: No:	Claims Claims	1-13
	Inve	ntive step (IS)	Yes: No:	Claims Claims	1-13
	Indu	strial applicability (IA)	Yes: No:	Claims Claims	1-13

2. Citations and explanations see separate sheet

VII. Certain defects in the international application

The following defects in the form or contents of the international application have been noted: see separate sheet

EXAMINATION REPORT - SEPARATE SHEET

Re Section V

Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

Reference is made to the following documents: 1.

D1: US-A-4 765 983 D2: WO-A-98 24412

D1 discloses (see Fig. I, col. 2, lines 58-68 and column 5, lines 64-68) an oral formulation comprising an adhesion site-controlling layer (3), a drug-carrying layer (2) containing a drug and a water-soluble polymer (e.g. an adhesive such as polyvinyl alcohol, sodium polyacrylate and methylcellulose) and a protecting layer (1), wherein the drug-carrying layer exists between the protecting layer and the adhesion site-controlling layer.

D2 discloses (see example 1) enteric coated particles, where the particles comprise a drug and a mucoadhesive and the enteric coating comprises e.g. Eudragit S100 or Eudragit L100. According to page 6, line 7 of D2 the particles can be placed into capsules.

Hence, the particle can be characterized as the drug-carrying layer, the enteric coating as the adhesion site-controlling layer and the capsule as the protecting layer (in accordance with present claim 1).

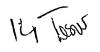
- The subject-matter of claim 1 is not novel (Art. 33(2) PCT) over D1 and D2, each 2. document taken separately (see above under item 1).
- In any claims amended to overcome the novelty objection it will be necessary that 3. said claims satisfy the requirements of inventive step (Art. 33(3) PCT). With regard to the assessment of inventive step in particular the document D2 appears relevant since concerned with oral formulations for gastrointestinal drug delivery.

4. A positive international preliminary report for the subject-matter of the dependent claims 2-13 can only be established when they refer to independent claims which meet the requirements of the PCT.

Re Section VII

Certain defects in the international application

Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art 1. disclosed in the documents D1 and D2 is not mentioned in the description, nor are these documents identified therein.





(PCT Article 36 and Rule 70)

Applicant's	or agen	t's file reference		See Notification of Transmittal of International			
99355M			FOR FURTHER ACTION	Preliminary Examination Report (Form PCT/IPEA/416)			
Internationa	ıl applica	ation No.	International filing date (day/monti	h/year) Priority date (day/month/year)			
PCT/JP9	9/0660)2	26/11/1999	27/11/1998			
Internationa A61K9/20		Classification (IPC) or nat	tional classification and IPC				
Applicant							
TAKADA	Kanji	et al.					
		ional preliminary exami nitted to the applicant a		d by this International Preliminary Examining Authority			
2. This F	REPOR	T consists of a total of	5 sheets, including this cover s	heet.			
bi (s	☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT). These annexes consist of a total of sheets.						
	_						
3. This re	eport c	ontains indications rela	ting to the following items:				
ı	⊠ (Basis of the report					
H	II Priority						
		Non-establishment of o	pinion with regard to novelty, in	ventive step and industrial applicability			
IV	□ ו	_ack of unity of invention	on				
V			nder Article 35(2) with regard to ons suporting such statement	novelty, inventive step or industrial applicability;			
VI	_	Certain documents cite	· -				
VII	⊠ (Certain defects in the in	nternational application				
VIII		Certain observations or	n the international application				
	_	· · · · · · · · · · · · · · · · · · ·					
Date of sub	mission	of the demand	Date of	completion of this report			
07/02/200	00		23.01.2	2001			
		address of the internationa	. Authoria	zed officer			
preliminary		ng authority: ean Patent Office					
<u>)</u>	D-802	98 Munich		gaard, A			
		49 89 2399 - 0 Tx: 523656 49 89 2399 - 4465	·	one No. +49 89 2399 8644			

International application No. PCT/JP99/06602

l. Bas	is of	the	report
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	the		on under Article 14 are referred to in this report as "originally liled" and are not annexed to one not contain amendments (Rules 70.16 and 70.17).):
	1-39	e	as originally filed
	Cla	ims, No.:	
	1-10	3	as originally filed
	Dra	wings, sheets:	
	1/5-	5/5	as originally filed
2.			uage, all the elements marked above were available or furnished to this Authority in the nternational application was filed, unless otherwise indicated under this item.
	The	se elements were a	available or furnished to this Authority in the following language: , which is:
		the language of a	translation furnished for the purposes of the international search (under Rule 23.1(b)).
		the language of pu	iblication of the international application (under Rule 48.3(b)).
		the language of a 55.2 and/or 55.3).	translation furnished for the purposes of international preliminary examination (under Rule
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		filed together with	the international application in computer readable form.
		furnished subsequ	ently to this Authority in written form.
		furnished subsequ	ently to this Authority in computer readable form.
			t the subsequently furnished written sequence listing does not go beyond the disclosure in oplication as filed has been furnished.
		The statement tha listing has been fu	t the information recorded in computer readable form is identical to the written sequence rnished.
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		the claims,	Nos.:

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International application No. PCT/JP99/06602

		the drawings,	sheets:		
5.		•			some of) the amendments had not been made, since they have been as filed (Rule 70.2(c)):
		(Any replacement sh report.)	eet contail	ning such	n amendments must be referred to under item 1 and annexed to this
6.	Add	litional observations, i	f necessar	y:	
٧.	7. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement				
1.	Stat	tement			
	Nov	velty (N)	Yes: No:	Claims Claims	1-13
	Inve	entive step (IS)	Yes: No:	Claims Claims	1-13
	Indu	ustrial applicability (IA)	Yes: No:	Claims Claims	1-13
		, ,		Claims	

2. Citations and explanations see separate sheet

VII. Certain defects in the international application

The following defects in the form or contents of the international application have been noted: see separate sheet

EXAMINATION REPORT - SEPARATE SHEET

R S ction V

Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

Reference is made to the following documents: 1.

D1: US-A-4 765 983 D2: WO-A-98 24412

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Hence, the particle can be characterized as the drug-carrying layer, the enteric coating as the adhesion site-controlling layer and the capsule as the protecting layer (in accordance with present claim 1).

- 2. The subject-matter of claim 1 is not novel (Art. 33(2) PCT) over D1 and D2, each document taken separately (see above under item 1).
- In any claims amended to overcome the novelty objection it will be necessary that 3. said claims satisfy the requirements of inventive step (Art. 33(3) PCT). With regard to the assessment of inventive step in particular the document D2 appears relevant since concerned with oral formulations for gastrointestinal drug delivery.

A positive international preliminary report for the subject-matter of the dependent 4. claims 2-13 can only be established when they refer to independent claims which meet the requirements of the PCT.

Re Section VII

Certain defects in the international application

Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art 1. disclosed in the documents D1 and D2 is not mentioned in the description, nor are these documents identified therein.

PATENT COOPERATION TREATY

	m the: ERNAT	IONA	L PRELIMINARY EXAMINII	NG AUTHORITY		00 8. 3 21
To:						PCT SIKE C
5th Ky	n Floor obash	, KRI i 1-cl				WRITTEN OPINION
	uo-ku, PON	Tok	yo 104-0031			(PCT Rule 66)
					Date of mailing (day/month/year)	31.07.2000
	olicant's 355M	or age	ent's file reference		REPLY DUE	within 3 month(s) from the above date of mailing
		al appl	ication No.	International filing date (/day/month/year)	Priority date (day/month/year)
	T/JP9	• • •		26/11/1999	, , ,	27/11/1998
Inte	rnationa	al Pate	ent Classification (IPC) or bot	th national classification ar	nd IPC	
A6	1K9/20)		•		·
App	olicant	-				
TA	KADA	Kan	ji et al.			
1.	This v	vritter	n opinion is the first draw	n up by this Internation	nal Preliminary Exam	ining Authority.
2.			n contains indications rel			
	11115	Piilio	n contains inclosure to		•	
	1	⊠	Basis of the opinion			
	Ш		Priority			and the december of the little of
	Ш				ovelty, inventive step	and industrial applicability
	IV		Lack of unity of inventio			
	V	×	Reasoned statement un citations and explanatio			nventive step or industrial applicability;
•	VI	-	Certain document cited	., .		
	VII	\boxtimes	Certain defects in the in	ternational application		
	VIII		Certain observations on		cation	
3.	The a	pplica	ant is hereby invited to re	eply to₁this opinion.		
	When	?	See the time limit indicated request this Authority to gra	above. The applicant may ant an extension, see Rule	y, before the expiration of 66.2(d).	of that time limit,
	How?		By submitting a written reply For the form and the langua	y, accompanied, where apage of the amendments, so	opropriate, by amendme se Rules 66.8 and 66.9.	ents, according to Rule 66.3.
	Also:		For an additional opportunit For the examiner's obligation For an informal communica	on to consider amendment	ts and/or arguments, se	e Rule 66.4 bis.
	If no re	eply is	s filed, the international preli	minary examination report	will be established on t	he basis of this opinion.
4.			e by which the international preport must be established a		27/03/2001.	

Name and mailing address of the international preliminary examining authority:



European Patent Office D-80298 Munich

Tel. +49 89 2399 - 0 Tx: 523656 epmu d

Fax: +49 89 2399 - 4465

Authorized officer / Examiner

Hedegaard, A

Formalities officer (incl. extension of time limits)

Tantum, P

Telephone No. +49 89 2399 8143



RECEIVED

_			
١.	Basis	of th	opinion
	D 4313	O:	~p

1.	Basis of th opinion	•
1.	This opinion has been in response to an invita	drawn on the basis of (substitute sheets which have been furnished to the receiving Office ation under Article 14 are referred to in this opinion as "originally filed".):
	Description, pages:	
	1-39	as originally filed
	Claims, No.:	
	1-13	as originally filed
	Drawings, sheets:	
	1/5-5/5	as originally filed
2.	The amendments have	resulted in the cancellation of:
	☐ the description,	pages:
	☐ the claims,	Nos.:
	☐ the drawings,	sheets:
3.	This opinion has been considered to go beyon	established as if (some of) the amendments had not been made, since they have been not the disclosure as filed (Rule 70.2(c)):
4.	Additional observations	s, if necessary:
	^	••• ••• ••• •••
۷.	Reasoned statement applicability; citation	under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial s and explanations supporting such statement
1.	Statement	
	Novelty (N)	Claims 1-13
	Inventive step (IS)	Claims 1-13
	Industrial applicability ((IA) Claims
		·

Form PCT/IPEA/408 (Boxes I-VIII, Sheet 1) (January 1994)

2. Citations and explanations sees parat sh t

WRITTEN OPINION

VII. Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

see separate sheet

Re Section V

Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

Reference is made to the following documents: 1.

D1: US-A-4 765 983 D2: WO-A-98 24412

D1 discloses (see Fig. I, col. 2, lines 58-68 and column 5, lines 64-68) an oral formulation comprising an adhesion site-controlling layer (3), a drug-carrying layer (2) containing a drug and a water-soluble polymer (e.g. an adhesive such as polyvinyl alcohol, sodium polyacrylate and methylcellulose) and a protecting layer (1), wherein the drug-carrying layer exists between the protecting layer and the adhesion site-controlling layer.

D2 discloses (see example 1) enteric coated particles, where the particles comprise a drug and a mucoadhesive and the enteric coating comprises e.g. Eudragit S100 or Eudragit L100. According to page 6, line 7 of D2 the particles can be placed into capsules.

Hence, the particle can be characterized as the drug-carrying layer, the enteric coating as the adhesion site-controlling layer and the capsule as the protecting layer (in accordance with present claim 1).

- The subject-matter of claim 1 is not novel (Art. 33(2) PCT) over D1 and D2, each 2. document taken separately (see above under item 1).
- In any claims amended to overcome the novelty objection it will be necessary that 3. said claims satisfy the requirements of inventive step (Art. 33(3) PCT). With regard to the assessment of inventive step in particular the document D2 appears relevant since concerned with oral formulations for gastrointestinal drug delivery.

A positive international preliminary report for the subject-matter of the dependent 4. claims 2-13 can only be established when they refer to independent claims which meet the requirements of the PCT.

Re Section VII

Certain defects in the international application

Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in the documents D1 and D2 is not mentioned in the description, nor are these documents identified therein.

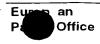


EPA/EPO/OEB
D-80298 München

TX 523 656 epmu d FAX +49 89 2399-4465



Europäisches Patentamt



Office européen des br vets

15

Generaldirektion 2

Directorate General 2

Direction Générale 2

Correspondence with the EPO on PCT Chapter II demands

In order to ensure that your PCT Chapter II demand is dealt with as promptly as possible you are requested to use the enclosed self-adhesive labels with any correspondence relating to the demand sent to the Munich Office.

One of these labels should be affixed to a prominent place in the upper part of the letter or form etc. which you are filing.

PCT

NOTIFICATION OF RECEIPT OF RECORD COPY

(PCT Rule 24.2(a))

From the INTERNATIONAL BUREAU

To:

IMAMURA, Masazumi KRF Building 5th Floor 5-5, Kyobashi 1-chome Chuo-ku Tokyo 104-0031 JAPON

• 700, 2, 14 ₹.Ը

Date of mailing (day/month/year) 16 December 1999 (16.12.99)	IMPORTANT NOTIFICATION
Applicant's or agent's file reference 99355M	International application No. PCT/JP99/06602

The applicant is hereby notified that the International Bureau has received the record copy of the international application as detailed below.

Name(s) of the applicant(s) and State(s) for which they are applicants:

TAKADA, Kanji (all designated States)

International filing date

26 November 1999 (26.11.99)

Priority date(s) claimed

27 November 1998 (27.11.98) 21 September 1999 (21.09.99)

Date of receipt of the record copy by the International Bureau

13 December 1999 (13.12.99)

List of designated Offices

AP:GH,GM,KE,LS,MW,SD,SL,SZ,TZ,UG,ZW

EA:AM,AZ,BY,KG,KZ,MD,RU,TJ,TM

EP:AT,BE,CH,CY,DE,DK,ES,FI,FR,GB,GR,IE,IT,LU,MC,NL,PT,SE

OA:BF,BJ,CF,CG,CI,CM,GA,GN,GW,ML,MR,NE,SN,TD,TG

National :AE,AL,AM,AT,AU,AZ,BA,BB,BG,BR,BY,CA,CH,CN,CR,CU,CZ,DE,DK,DM,EE,ES,FI,GB,GD,GE,GH,GM,HR,HU,ID,IL,IN,IS,JP,KE,KG,KR,KZ,LC,LK,LR,LS,LT,LU,LV,MA,MD,MG,MK,MN,MW,MX,NO,NZ,PL,PT,RO,RU,SD,SE,SG,SI,SK,SL,TJ,TM,TR,TT,TZ,UA,UG,US,UZ,VN,YU,ZA,ZW

ATTENTION

The applicant should carefully check the data appearing in this Notification. In case of any discrepancy between these data and the indications in the international application, the applicant should immediately inform the International Bureau.

In addition, the applicant's attention is drawn to the information contained in the Annex, relating to:

X time limits for entry into the national phase

X confirmation of precautionary designations

X requirements regarding priority documents

A copy of this Notification is being sent to the receiving Office and to the International Searching Authority.

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Authorized officer:

Monda Masashi HONDA

Facsimile No. (41-22) 740.14.35

Telephone No. (41-22) 338.83.38



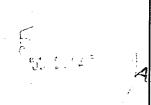
From the INTERNATIONAL BUREAU

PCT

NOTIFICATION CONCERNING SUBMISSION OR TRANSMITTAL OF PRIORITY DOCUMENT

(PCT Administrative Instructions, Section 411)

IMAMURA, Masazumi KRF Building 5th Floor 5-5, Kyobashi 1-chome Chuo-ku Tokyo 104-0031 JAPON



IMPORTANT NOTIFICATION		
International filing date (day/month/year) 26 November 1999 (26.11.99)		
Priority date (day/month/year) 27 November 1998 (27.11.98)		

- 1. The applicant is hereby notified of the date of receipt (except where the letters "NR" appear in the right-hand column) by the International Bureau of the priority document(s) relating to the earlier application(s) indicated below. Unless otherwise indicated by an asterisk appearing next to a date of receipt, or by the letters "NR", in the right-hand column, the priority document concerned was submitted or transmitted to the International Bureau in compliance with Rule 17.1(a) or (b).
- 2. This updates and replaces any previously issued notification concerning submission or transmittal of priority documents.
- 3. An asterisk(*) appearing next to a date of receipt, in the right-hand column, denotes a priority document submitted or transmitted to the International Bureau but not in compliance with Rule 17.1(a) or (b). In such a case, the attention of the applicant is directed to Rule 17.1(c) which provides that no designated Office may disregard the priority claim concerned before giving the applicant an opportunity, upon entry into the national phase, to furnish the priority document within a time limit which is reasonable under the circumstances.
- 4. The letters "NR" appearing in the right-hand column denote a priority document which was not received by the International Bureau or which the applicant did not request the receiving Office to prepare and transmit to the International Bureau, as provided by Rule 17.1(a) or (b), respectively. In such a case, the attention of the applicant is directed to Rule 17.1(c) which provides that no designated Office may disregard the priority claim concerned before giving the applicant an opportunity, upon entry into the national phase, to furnish the priority document within a time limit which is reasonable under the circumstances.

<u>Priority date</u>	Priority application No.	Country or regional Office or PCT receiving Office	Date of receipt of priority document
27 Nove 1998 (27.11.98)	10/353966	JP	28 Janu 2000 (28.01.00)
21 Sept 1999 (21.09.99)	11/266433	JP	21 Janu 2000 (21.01.00)

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Authorized officer

Taïeb Akremi

Telephone No. (41-22) 338.83.38

Facsimile No. (41-22) 740.14.35

PCT

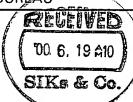
NOTICE INFORMING THE APPLICANT OF THE COMMUNICATION OF THE INTERNATIONAL APPLICATION TO THE DESIGNATED OFFICES

(PCT Rule 47.1(c), first sentence)

From the INTERNATIONAL BUREAU

To:

IMAMURA, Masazumi KRF Building 5th Floor 5-5, Kyobashi 1-chome Chuo-ku Tokyo 104-0031 JAPON



Date of mailing (day/month/year) 08 June 2000 (08.06.00)			
Applicant's or agent's file reference 99355M		IMPORTANT NOTICE	
International application No. PCT/JP99/06602	International filing da	ate (day/month/year) r 1999 (26.11.99)	Priority date (day/month/year) 27 November 1998 (27.11.98)
Applicant TAKADA, Kanji			

 Notice is hereby given that the International Bureau has communicated, as provided in Article 20, the international application to the following designated Offices on the date indicated above as the date of mailing of this Notice: AU,CN,JP,KR,MA,US

In accordance with Rule 47.1(c), third sentence, those Offices will accept the present Notice as conclusive evidence that the communication of the international application has duly taken place on the date of mailing indicated above and no copy of the international application is required to be furnished by the applicant to the designated Office(s).

2. The following designated Offices have waived the requirement for such a communication at this time:

AE,AL,AM,AP,AT,AZ,BA,BB,BG,BR,BY,CA,CH,CR,CU,CZ,DE,DK,DM,EA,EE,EP,ES,FI,GB,GD,GE,GH,GM,HR,HU,ID,IL,IN,IS,KE,KG,KZ,LC,LK,LR,LS,LT,LU,LV,MD,MG,MK,MN,MW,MX,NO,NZ,OA,

PL,PT,RO,RU,SD,SE,SG,SI,SK,SL,TJ,TM,TR,TT,TZ,UA,UG,UZ,VN,YU,ZA,ZW The communication will be made to those Offices only upon their request. Furthermore, those Offices do not require the applicant to furnish a copy of the international application (Rule 49.1(a-bis)).

 Enclosed with this Notice is a copy of the international application as published by the International Bureau on 08 June 2000 (08.06.00) under No. WO 00/32172

REMINDER REGARDING CHAPTER II (Article 31(2)(a) and Rule 54.2)

If the applicant wishes to postpone entry into the national phase until 30 months (or later in some Offices) from the priority date, a demand for international preliminary examination must be filed with the competent International Preliminary Examining Authority before the expiration of 19 months from the priority date.

It is the applicant's sole responsibility to monitor the 19-month time limit.

Note that only an applicant who is a national or resident of a PCT Contracting State which is bound by Chapter II has the right to file a demand for international preliminary examination.

REMINDER REGARDING ENTRY INTO THE NATIONAL PHASE (Article 22 or 39(1))

If the applicant wishes to proceed with the international application in the national phase, he must, within 20 months or 30 months, or later in some Offices, perform the acts referred to therein before each designated or elected Office.

For further important information on the time limits and acts to be performed for entering the national phase, see the Annex to Form PCT/IB/301 (Notification of Receipt of Record Copy) and Volume II of the PCT Applicant's Guide.

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Authorized officer

J. Zahra

Telephone No. (41-22) 338.83.38

Facsimile No. (41-22) 740.14.35

Continuation of Form PCT/IB/308 NOTICE IN TRAINING THE APPLICANT OF THE COMMUNICATION OF THE INTERNATIONAL APPLICATION TO THE DESIGNATED OFFICES

Date of mailing (day/month/year) 08 June 2000 (08.06.00)	IMPORTANT NOTICE
Applicant's or agent's file reference 99355M	International application No. PCT/JP99/06602

The applicant is hereby notified that, at the time of establishment of this Notice, the time limit under Rule 46.1 for making amendments under Article 19 has not yet expired and the International Bureau had received neither such amendments nor a declaration that the applicant does not wish to make amendments.



PCT

INFORMATION CONCERNING ELECTED OFFICES NOTIFIED OF THEIR ELECTION

(PCT Rule 61.3)

From the INTERNATIONAL BUREAU

To:

IMAMURA, Masazumi KRF Building 5th Floor 5-5, Kyobashi 1-chome Chuo-ku Tokyo 104-0031 JAPON



Date of mailing (day/month/year) 08 June 2000 (08.06.00)	·		
Applicant's or agent's file reference 99355M		IMPO	RTANT INFORMATION
International application No. PCT/JP99/06602	International filing da	ate (day/month/year) er 1999 (26.11.99)	Priority date (day/month/year) 27 November 1998 (27.11.98)

1. The applicant is hereby informed that the International Bureau has, according to Article 31(7), notified each of the following Offices of its election:

AP:GH,GM,KE,LS,MW,SD,SL,SZ,TZ,UG,ZW

EP:AT,BE,CH,CY,DE,DK,ES,FI,FR,GB,GR,IE,IT,LU,MC,NL,PT,SE

National :AU,BG,BR,CA,CN,CZ,DE,IL,JP,KR,MA,MN,NO,NZ,PL,RO,RU,SE,SK,US

2. The following Offices have waived the requirement for the notification of their election; the notification will be sent to them by the International Bureau only upon their request:

EA:AM,AZ,BY,KG,KZ,MD,RU,TJ,TM

OA:BF,BJ,CF,CG,CI,CM,GA,GN,GW,ML,MR,NE,SN,TD,TG

National :AE,AL,AM,AT,AZ,BA,BB,BY,CH,CR,CU,DK,DM,EE,ES,FI,GB,GD,GE,GH,GM,

HR,HU,ID,IN,IS,KE,KG,KZ,LC,LK,LR,LS,LT,LU,LV,MD,MG,MK,MW,MX,PT,SD,SG,SI,

SL,TJ,TM,TR,TT,TZ,UA,UG,UZ,VN,YU,ZA,ZW

3. The applicant is reminded that he must enter the "national phase" before the expiration of 30 months from the priority date before each of the Offices listed above. This must be done by paying the national fee(s) and furnishing, if prescribed, a translation of the international application (Article 39(1)(a)), as well as, where applicable, by furnishing a translation of any annexes of the international preliminary examination report (Article 36(3)(b) and Rule 74.1).

Some offices have fixed time limits expiring later than the above-mentioned time limit. For detailed information about the applicable time limits and the acts to be performed upon entry into the national phase before a particular Office, see Volume II of the PCT Applicant's Guide.

The entry into the European regional phase is postponed until 31 months from the priority date for all States designated for the purposes of obtaining a European patent.

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland

Authorized officer:

J. Zahra

Telephone No. (41-22) 338.83.38

TENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORITY	PCT
To: Imamura, Masazumi 5th Floor, KRF Bldg., 5-5, Kyobashi l-chome Chuo-ku, Tokyo 104-0031 JAPAN	NOTIFICATION OF TRANSMITTAL OF THE INTERNATIONAL SEARCH REPORT OR THE DECLARATION 10. 4. 26 4 (PCT Rule 44.1) SIKs & Co. Date of mailing (day/month/year) 11/04/2000
Applicant's or agent's file reference	
99355M	FOR FURTHER ACTION See paragraphs 1 and 4 below
International application No. PCT/JP 99/06602	International filing date (day/month/year) 26/11/1999
Applicant	
TAKADA Kanji et al.	
1. X The applicant is hereby notified that the International Sear	ch Report has been established and is transmitted herewith.
Filing of amendments and statement under Article 19: The applicant is entitled, if he so wishes, to amend the clai	
When? The time limit for filing such amendments is norm International Search Report; however, for more d	nally 2 months from the date of transmittal of the details, see the notes on the accompanying sheet.
Where? Directly to the International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Fascimile No.: (41–22) 740.14.3	5
For more detailed instructions, see the notes on the acco	ompanying sheet.
2. The applicant is hereby notified that no International Search Article 17(2)(a) to that effect is transmitted herewith.	th Report will be established and that the declaration under
3. With regard to the protest against payment of (an) addition	onal fee(s) under Rule 40.2, the applicant is notified that:
the protest together with the decision thereon has bee applicant's request to forward the texts of both the pro	en transmitted to the International Bureau together with the otest and the decision thereon to the designated Offices.
no decision has been made yet on the protest; the app	plicant will be notified as soon as a decision is made.
4. Further action(s): The applicant is reminded of the following:	.•
Shortly after 18 months from the priority date, the international ap If the applicant wishes to avoid or postpone publication, a notice priority claim, must reach the International Bureau as provided completion of the technical preparations for international publica	e of withdrawal of the international application, or of the in Rules 90 <i>bis</i> ,1 and 90 <i>bis</i> ,3, respectively, before the
Within 19 months from the priority date, a demand for international wishes to postpone the entry into the national phase until 30 mo	al preliminary examination must be filed if the applicant onths from the priority date (in some Offices even later).
Within 20 months from the priority date, the applicant must perfor before all designated Offices which have not been elected in the priority date or could not be elected because they are not bound	e demand or in a later election within 19 months from the
Name and mailing address of the International Searching Authority	Authorized officer
European Patent Office, P.B. 5818 Patentiaan 2 NL-2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,	Barbara Klaver

These Notes are intended to give the basic instructions concerning the filing of amendments under article 19. The Notes are based on the requirements of the Patent Cooperation Treaty, the Regulations and the Administrative Instructions under that Treaty. In case of discrepancy between these Notes and those requirements, the latter are applicable. For more detailed information, see also the PCT Applicant's Guide, a publication of WIPO.

In these Notes, "Article", "Rule", and "Section" refer to the provisions of the PCT, the PCT Regulations and the PCT Administrative Instructions respectively.

INSTRUCTIONS CONCERNING AMENDMENTS UNDER ARTICLE 19

The applicant has, after having received the international search report, one opportunity to amend the claims of the international application. It should however be emphasized that, since all parts of the international application (claims, description and drawings) may be amended during the international preliminary examination procedure, there is usually no need to file amendments of the claims under Article 19 except where, e.g. the applicant wants the latter to be published for the purposes of provisional protection or has another reason for amending the claims before international policiation. Furthermore, it should be emphasized that provisional protection is available in some States only.

What parts of the international application may be amended?

Under Article 19, only the claims may be amended.

During the international phase, the claims may also be amended (or further amended) under Article 34 before the International Preliminary Examining Authority. The description and drawings may only be amended under Article 34 before the International Examining Authority.

Upon entry into the national phase, all parts of the international application may be amended under Article 28 or, where applicable, Article 41.

When?

Within 2 months from the date of transmittal of the international search report or 16 months from the priority date, whichever time limit expires later. It should be noted, however, that the amendments will be considered as having been received on time if they are received by the International Bureau after the expiration of the applicable time limit but before the completion of the technical preparations for international publication (Rule 46.1).

Where not to file the amendments?

The amendments may only be filed with the International Bureau and not with the receiving Office or the International Searching Authority (Rule 46.2).

Where a demand for international preliminary examination has been lis filed, see below.

How?

Either by cancelling one or more entire claims, by adding one or more new claims or by amending the text of one or more of the claims as filed.

A replacement sheet must be submitted for each sheet of the claims which, on account of an amendment or amendments, differs from the sheet originally filed.

All the claims appearing on a replacement sheet must be numbered in Arabic numerals. Where a claim is cancelled, no renumbering of the other claims is required. In all cases where claims are renumbered, they must be renumbered consecutively (Administrative Instructions, Section 205(b)).

The amendments must be made in the language in which the international application is to be published.

What documents must/may accompany the amendments?

Letter (Section 205(b)):

The amendments must be submitted with a letter.

The letter will not be published with the international application and the amended claims. It should not be confused with the "Statement under Article 19(1)" (see below, under "Statement under Article 19(1)").

The letter must be in English or French, at the choice of the applicant. However, if the language of the international application is English, the letter must be in English; if the language of the international application is French, the letter must be in French.

The letter must indicate the differences between the claims as filed and the claims as amended. It must, in particular, indicate, in connection with each claim appearing in the international application (it being understood that identical indications concerning several claims may be grouped), whether

- (i) the claim is unchanged;
- (ii) the claim is cancelled;
- (iii) the claim is new;
- (iv) the claim replaces one or more claims as filed;
- (v) the claim is the result of the division of a claim as filed.

The following examples illustrate the manner in which amendments must be explained in the accompanying letter:

- [Where originally there were 48 claims and after amendment of some claims there are 51]:
 "Claims 1 to 29, 31, 32, 34, 35, 37 to 48 replaced by amended claims bearing the same numbers; claims 30, 33 and 36 unchanged; new claims 49 to 51 added."
- [Where originally there were 15 claims and after amendment of all claims there are 11]: "Claims 1 to 15 replaced by amended claims 1 to 11."
- [Where originally there were 14 claims and the amendments consist in cancelling some claims and in adding new claims]:
 "Claims 1 to 6 and 14 unchanged; claims 7 to 13 cancelled; new claims 15, 16 and 17 added." or "Claims 7 to 13 cancelled; new claims 15, 16 and 17 added; all other claims unchanged."
- 4. [Where various kinds of amendments are made]: "Claims 1-10 unchanged; claims 11 to 13, 18 and 19 cancelled; claims 14, 15 and 16 replaced by amended claim 14; claim 17 subdivided into amended claims 15, 16 and 17; new claims 20 and 21 added."

"Statement under article 19(1)" (Rule 46.4)

The amendments may be accompanied by a statement explaining the amendments and indicating any impact that such amendments might have on the description and the drawings (which cannot be amended under Article 19(1)).

The statement will be published with the international application and the amended claims.

it must be in the language in which the international appplication is to be published.

it must be brief, not exceeding 500 words if in English or if translated into English.

It should not be confused with and does not replace the letter indicating the differences between the claims as filed and as amended. It must be filed on a separate sheet and must be identified as such by a heading, preferably by using the words "Statement under Article 19(1)."

It may not contain any disparaging comments on the international search report or the relevance of citations contained in that report. Reference to citations, relevant to a given claim, contained in the international search report may be made only in connection with an amendment of that claim.

Consequence if a demand for international preliminary examination has already been filed

If, at the time of filing any amendments under Article 19, a demand for international preliminary examination has already been submitted, the applicant must preferably, at the same time of filing the amendments with the International Bureau, also file a copy of such amendments with the International Preliminary Examining Authority (see Rule 62.2(a), first sentence).

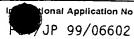
Consequence with regard to translation of the international application for entry into the national phase

The applicant's attention is drawn to the fact that, where upon entry into the national phase, a translation of the claims as amended under Article 19 may have to be furnished to the designated/elected Offices, instead of, or in addition to, the translation of the claims as filed.

For further details on the requirements of each designated/elected Office, see Volume II of the PCT Applicant's Guide.

(PCT Article 18 and Rules 43 and 44)

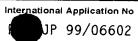
Applicant's or agent's file reference	FOR FURTHER see Notification of	of Transmittal of International Search Report
99355M	ACTION (Form PC1/ISA/2	20) as well as, where applicable, item 5 below.
International application No.	International filing date (day/month/year)	(Earliest) Priority Date (day/month/year)
PCT/JP 99/06602	26/11/1999	27/11/1998
Applicant		
TAKADA Kanji ot al		
TAKADA Kanji et al.		·
This International Search Report has been according to Article 18. A copy is being trai	prepared by this International Searching Auth nsmitted to the International Bureau.	ority and is transmitted to the applicant
This International Search Report consists of	of a total of3 sheets.	
	a copy of each prior art document cited in this r	report.
Basis of the report		
With regard to the language, the ir language in which it was filed, unle	nternational search was carried out on the basi ss otherwise indicated under this item.	s of the international application in the
the international search wa Authority (Rule 23.1(b)).	s carried out on the basis of a translation of the	e international application furnished to this
	or amino acid sequence disclosed in the inte	ernational application, the international search
	al application in written form.	·
	national application in computer readable form.	
furnished subsequently to the		
	nis Authority in computer readble form.	
international application as	equently furnished written sequence listing doe filed has been furnished.	es not go beyond the disclosure in the
the statement that the information furnished	nation recorded in computer readable form is i	dentical to the written sequence listing has been
2. Certain claims were found	unsearchable (See Box I).	
3. Unity of invention is lacking	ng (see Box II).	
4. With regard to the title,		
X the text is approved as subm	nitted by the applicant.	
the text has been established	d by this Authority to read as follows:	
5. With regard to the abstract,		
the text is approved as subm the text has been established within one month from the da	itted by the applicant. d, according to Rule 38.2(b), by this Authority a te of mailing of this international search report	as it appears in Box III. The applicant may, , submit comments to this Authority
6. The figure of the drawings to be published		
as suggested by the applican	ıt.	X None of the figures.
because the applicant failed	o suggest a figure.	· ·
because this figure better cha	aracterizes the invention.	



A. CLASSIFICATION OF SUBJECT MATTER IPC 7 A61K9/20 According to International Patent Classification (IPC) or to both national classification and IPC Minimum documentation searched (classification system followed by classification symbols) IPC 7 A61K Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) C. DOCUMENTS CONSIDERED TO BE RELEVANT Category 9 Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. Χ US 4 765 983 A (TAKAYANAGI HITOSHI ET AL) 1-3,6,923 August 1988 (1988-08-23) column 1, line 6 - line 14 Α 4,5,7,8, 10,11 column 1, line 53 - line 57 column 2, line 68 -column 3, line 2 column 3, line 42 - line 49 column 4, line 32 - line 33; claims 1,6-8; figures 1,2; examples 1,2 X WO 98 24412 A (UNIV ILLINOIS ; GROVES 1,8,9,12 MICHAEL (US)) 11 June 1998 (1998-06-11) page 1, line 2 - line 4 Α 13 page 1, line 9 - 1ine 18page 4, line 8 - line 13 page 5, line 3 - line 9 page 6, line 6 - line 9; claims 1-4,8,9; example 1 Χ Further documents are listed in the continuation of box C. Patent family members are listed in annex. Special categories of cited documents: "T" later document published after the international filing date or priority date and not in conflict with the application but "A" document defining the general state of the art which is not cited to understand the principle or theory underlying the considered to be of particular relevance invention "E" earlier document but published on or after the international "X" document of particular relevance; the claimed invention filing date cannot be considered novel or cannot be considered to "L" document which may throw doubts on priority claim(s) or involve an inventive step when the document is taken alone which is cited to establish the publication date of another "Y" document of particular relevance; the claimed invention citation or other special reason (as specified) cannot be considered to involve an inventive step when the "O" document referring to an oral disclosure, use, exhibition or document is combined with one or more other such docu other means ments, such combination being obvious to a person skilled document published prior to the international filing date but later than the priority date claimed "&" document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report 4 April 2000 11/04/2000 Name and mailing address of the ISA Authorized officer European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Marttin, E

Fax: (+31-70) 340-3016

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C.(Continu	ation) DOCUMENTS CONSIDERED TO BE RELEVANT	/06602
Category °	Citation of document, with indication where appropriate, of the relevant passages	Relevant to claim No.
A -	US 5 236 713 A (WATO TAKAHIKO ET AL) 17 August 1993 (1993-08-17) column 2, line 19 - line 28; figures 1-3 column 2, line 34 - line 47 column 3, line 33 - line 37; claims 1-4; example 3	1-11
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WO 9824412	Α	11-06-1998	NONE	
US 5236713	A	17-08-1993	JP 1110622 A JP 2573969 B	27-04-1989 22-01-1997





A CLASSIFICATION OF SUBJECT MATTER IPC 7 A61K9/20

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols) IPC 7-A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

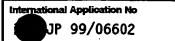
Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 765 983 A (TAKAYANAGI HITOSHI ET AL) 23 August 1988 (1988-08-23)	1-3,6,9
A	column 1, line 6 - line 14	4,5,7,8, 10,11
	column 1, line 53 - line 57	1
	column 2, line 68 -column 3, line 2	
	column 3, line 42 - line 49	
	column 4, line 32 - line 33; claims 1,6-8;	-
	figures 1,2; examples 1,2	
X	WO 98 24412 A (UNIV ILLINOIS ;GROVES MICHAEL (US)) 11 June 1998 (1998-06-11)	1,8,9,12
A	page 1, line 2 - line 4	13
•	page 1, line 9 - line 18	
	page 4, line 8 - line 13	
	page 5, line 3 - line 9	
	page 6, line 6 - line 9; claims 1-4,8,9;	
	example 1	
		

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Further documents are listed in the continuation of box C.	Patent family members are listed in annex.
Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed	"T" later document published after the international filling date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. "&" document member of the same patent family
Date of the actual completion of the International search 4 April 2000	Date of mailing of the international search report $11/04/2000$
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentiaan 2 NL – 2280 HV Rijswijk Tel. (+31–70) 340–2040, Tx. 31 651 epo ni, Fax: (+31–70) 340–3016	Authorized officer Marttin, E

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C (Continue	ation) DOCUMENTS CONSIDERED TO BE RELEVANT		7 00002
Category °			Relevant to claim No.
A	US 5 236 713 A (WATO TAKAHIKO ET AL) 17 August 1993 (1993-08-17) column 2, line 19 - line 28; figures 1-3 column 2, line 34 - line 47 column 3, line 33 - line 37; claims 1-4; example 3	· · · · · · · · · · · · · · · · · · ·	1–11
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